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Less is More: Information and Priming in Charitable Donations

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Less is More: Information and Priming in Charitable Donations
An honors thesis submitted in partial fulfillment of the requirements for the degree of Bachelors
of Science in International Business, in Economics

By

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INTRODUCTION

In the Dictator Game, one player, the dictator, is rewarded a sum of money. The dictator must then decide how much or little of that money to give to a secondary player (Camerer, 2003). In order to maximize payoffs, the dictator should decide give nothing to the second player, but in practice this is often not the case. Because there is no monetary incentive to give the second player any of the money, something else must be motivating the dictator. This shows that the dictator's utility function includes other factors than merely monetary payoffs. This discrepancy is attributed to social preferences, in particular altruism and fairness. Though it is easy to attribute the results of the Dictator Game to these ideals, it is not as simple to understand where or why these values originated (Camerer, 2003).

An institution is a set of rules or norms, formal or informal that influences a person's choice given a set of actions. Religion is an institution that has significant effects on individual's economic decisions, beliefs, and views on others (Guiso et al, 2003). To determine if religion led to prosocial behavior, behavior leading to the benefit of others, or antisocial behavior, behavior leading to hindrance of others, Shariff and Norenzayan (2006) conducted a study using the Dictator Game. In order to isolate the causal impact from religiosity to prosocial behavior and avoid reverse causality (e.g., prosocial individuals might be extremely more likely to be religious, or vice versa), Shariff and Norenzayan primed participant, by having them complete word puzzle that included words associated with religion and having a control group complete no puzzles. The results of the games showed that having the religious prime had more influence on the amount given than self-reported religiosity. A second study was conducted using a more diverse group of participants. Rather than only priming one group with a religious word puzzle, one group of participants was primed with a justice-theme word puzzle and another with a

neutral-theme word puzzle. The participants were again asked to play the Dictator Game. The religious-primed group gave the highest average of \$4.60 out of \$10 (s.d. 3.03). The justice-primed group gave on of average of \$4.40 out of \$10 (s.d. 3.00). The neutral-primed group gave the least, an average of \$2.60 out of \$10 (s.d. 2.69). Again, the priming was a significantly better indicator of the amount given than self-reported religious beliefs.

In contrast, a similar study was conducted by Benjamin, Choi, and Fisher (2010). Using the same priming method, they found contradictory results. The type of prime had no significant influence on the amount given, and the self-reported religiosity had a significant influence on the amount given.

Another consideration in the Dictator Game is the degree of social distance between the dictator and the second player. Social distance is defined by “the emotional proximity induced by the situation” and is determined by varying factors, including nationality, religion, occupation, and race (Charness & Gneezy, 2008). Decreased social distance has been shown to significantly increase the amount allocated to the second player by the dictator ((Charness & Gneezy, 2008). The weight placed on specific determinants of social distance varies by social groups (Triandis & Triandis, 1960). For example, one social group might put more weights on religion to relative to nationality in measuring social distance, while another group might hold the opposite view.

In order to further research the question raised by Shariff and Norenzayan, a similar study was conducted that attempted to answer the following questions: Would results differ if the second player were a charity? Does religious identity affect the amount allocated to a charity benefitting a domestic charity or an international charity?

METHODOLOGY

Data Collection

In order to evaluate these questions, a group of participants were surveyed using techniques similar to those used in the second study conducted by Shariff and Norenzayan (2006). The participants were primed using the same word game method and randomly assigned a religious, justice, or neutral theme. However, instead of allocating money to an anonymous second player, the participants were randomly assigned one of three charities to allocate money to. The charities focused on helping those in the agricultural industry in the Arkansas Delta and Appalachia, focused on helping those in the agricultural industry in Haiti, or remained nameless. The wording remained constant between the three scenarios to avoid any framing bias. Because of the effect of social distance, typically people will be more like to give to a named entity than an unnamed one (Charness & Gneezy, 2008). In order to establish the importance of location of the charity's beneficiaries on giving behavior, one-third of the participants were assigned a nameless charity, as a control.

A charity was chosen in place of naming a second player of a different nationality, so that the participants would find the study more believable. The participants were instructed that all of the money allocated to the charity would be donated to the charity listed, which it was. It would be more difficult for participants to believe that the money they were allocating to the second player was going to be given to that second player unless they had reason to believe this person actually existed. Also, by naming the second as a charity, this study has more real world applications. In American culture, it is more likely to donate money to a charity than it is to randomly give money to a stranger. If donating to a charity was purely altruistic, then no matter the charity donated to, the payoffs should be the same. However in the real world, people prefer

to donate to certain charities over others, meaning they receive a higher increase in utility from donating to specific charities. It follows that altruism is not the only influencing factor that determines charitable donations, unless the donations is purely made out of convenience, and there is no preference to what charity is being donated to.

After the participants chose the amount to allocate to the charity, they self-reported demographic information, including what religion they identified with. Because religious identity is not only determined by what religion is practiced, but how present the religion is in their life, also known as religious salience, the participants self-reported how often they practiced their religion. They were given the choice of selecting the following options to best describe how often they practice their religion, if at all: once a year, on major holidays, once a month, once a week, more than once a week, never, or prefer not to answer. Once a year was assigned a value of 1, on major holidays, 2, once a month, 3, once a week, 4, more than once a week, 5, and prefer not to answer, 6.

There are many potential problems with this method. Because this data is self-reported and not verifiable, there is a tendency for participants to overestimate how often they practice. This tendency most likely is uniform to all who reported to practice their religion, so the bias should be constant. Another concern is that the options are discrete; a participant might practice an amount in between the options provided. For example, a participant might attend religious ceremonies on major holidays and other time throughout the year, but not monthly. The phrasing used also affects the choice of the participant. The word “practice” has different interpretations. One participant might interpret practice to only mean attending organized religious ceremonies and not include things such as daily prayer. Other participants might view the way that they treat people or what they eat as practicing their religion and therefore report a

higher amount.

Asking participants to report how often they practice their religion or belief system was used as a proxy for religious salience but religious practice frequency is not a perfect reflection of its salience. How often one practices religion depends significantly on what religion one is practicing. Religions are inherently different, and it is difficult to make comparisons between them, especially when comparing how they are practiced. In addition, this is even more difficult to compare religions and belief systems. A belief system might be deeply held, having a profound impact on lifestyle, but never practice, and someone might practice their religion on a regular basis, while it does not influence their lifestyle. Because of this, similar religions and belief systems were grouped together based on the belief in a deity, *Nontheistic* and *Theistic*.

The study was conducted in a classroom setting, in four different classes. Because of this, participants were able to see the amounts other participants allocated, and vice versa. This most likely caused participants to allocate more to the charity than they would if it had been anonymous. Two classes were Religious Studies classes, and two were French classes. Religion was more likely to be salient in the minds of the Religious Studies students. It is also likely that social distance was decreased between the French students and the charity benefitting those in Haiti, because of the commonality of language between the two groups. Because of the possible relationship between which the subject of the class and the amount kept, a Religious Studies binary variable was included in analysis, recorded as 1 for students surveyed in Religious Studies classes and 0 for students surveyed in French classes.

One difference between this study and the one conducted by Shariff and Norenzayan was the monetary amount. In Shariff's and Norenzayan's study, participants allocated ten dollars

between themselves and a second player, and in this study, participants allocated one dollar between themselves and the charity.

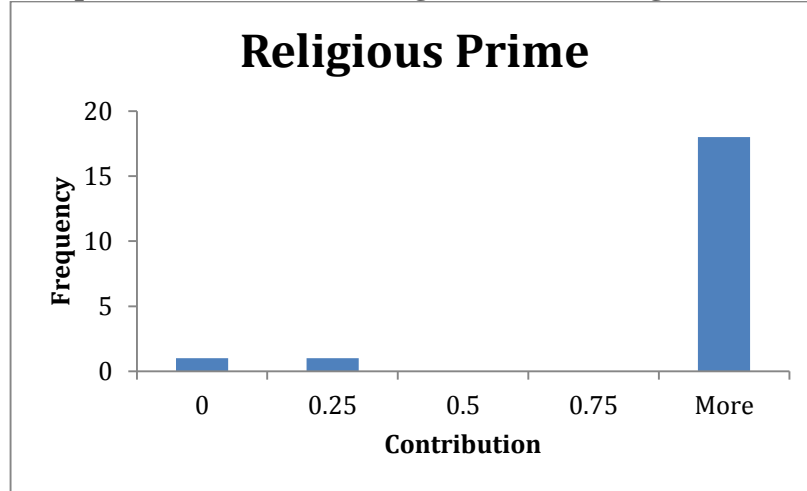
All nine variations of the surveys, from the combination of the three primers and three charities, are included in Appendices A through I. The proportion of participants within each combination of primer and charity is shown in Table 2. The second page of the survey, requesting self-reported demographic information, is included in Appendix J. The participants were given an informational handout after their participation in the study, disclosing that they were unknowingly subjected to a primer and giving more information about the charities benefitted from this study, which is included in Appendix K.

Table 1: Distribution of Participants by Prime and Charity

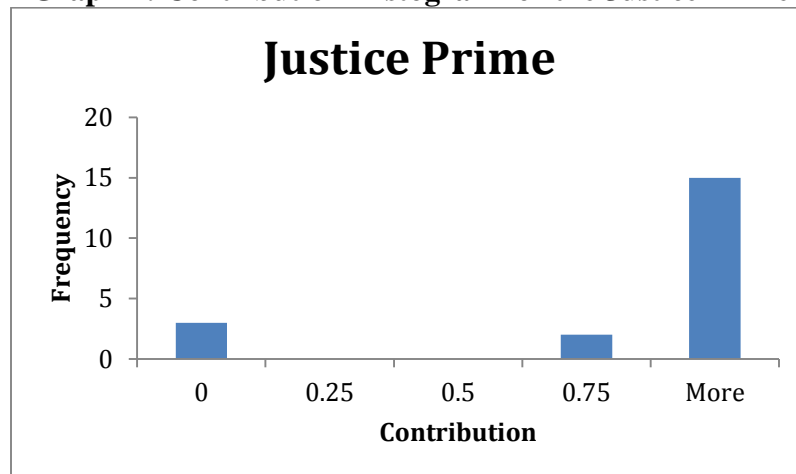
	Religious Prime	Justice Prime	Neutral Prime	Total
Domestic Charity	7	7	7	21
International Charity	6	7	7	20
Unnamed Charity	7	6	6	19
Total	20	20	20	60

Results

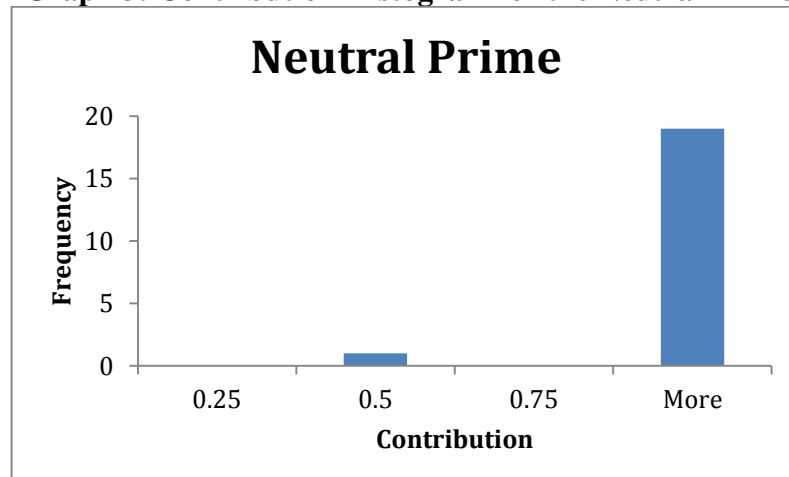
Graph 1: Contribution Histogram for the Religious Prime



Graph 2: Contribution Histogram for the Justice Prime



Graph 3: Contribution Histogram for the Neutral Prime



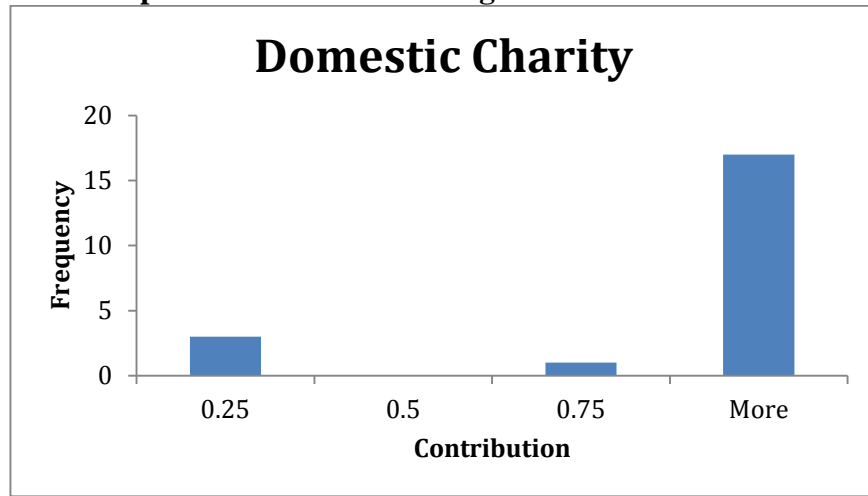
To analyze if the prime had an effect, each the mean and standard deviation of each prime was calculated, and were as follows:

Table 2: Descriptive Statistic by Primer

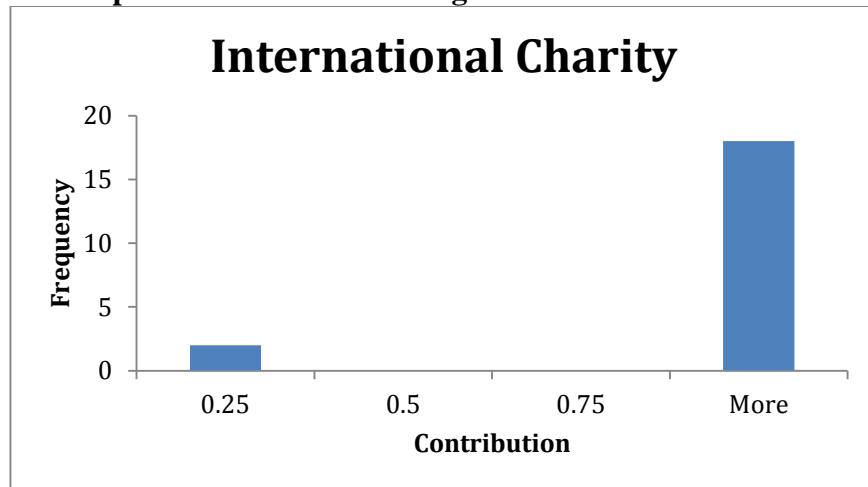
	Religious	Justice	Neutral
Mean	0.905	0.825	0.975
Standard Deviation	0.29	0.36	0.11
95% Confidence Interval	[.875, .935]	[.788, .862]	[.964, .986]

Because none of the confidence intervals intersect, one can conclude with 95% confidence that the prime has a significant effect on the amount given by the dictator. This is in accordance with findings of Shariff and Norenzayan (2006). However, these results differ in the direction of the influence of the prime. In Shariff and Norenzayan (2006), the Religious-primed group contributed the most, followed by the Secular-primed, and lastly the Neutral-primed giving the least. These findings suggest that having no primer causes higher given, while a religious and secular prime decreases the amount given, with the secular prime having a more extreme effect. These results not only contradict the notion that religiosity and the social ideal of justice increase prosocial behavior, but in fact, reduce it.

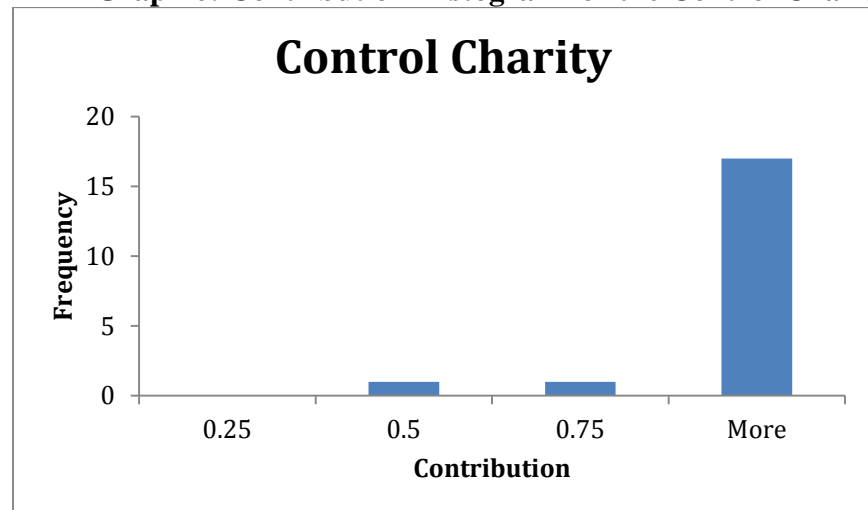
Graph 4: Contribution Histogram for the Domestic Charity



Graph 5: Contribution Histogram for the International Charity



Graph 6: Contribution Histogram for the Control Charity



The same methodology was applied to the charities, and the results are as follows:

Table 3: Descriptive Statistic by Charity

	Domestic	International	Control
Mean	0.893	0.900	0.961
Standard Deviation	0.30	0.31	0.13
95% Confidence Interval	[.864, .921]	[.869, .931]	[.947, .974]

In contrast to the belief that the dictator knowing more information about the second player reduces social distance and, therefore, will increase the amount given, the results show the opposite. While there is statistically no difference between the amount given to the domestic and international charity, the participants' contributions were significantly larger when the charity was unnamed. This means participants were more willing to donate having no knowledge of the charity or its purpose than when given the information. The fact that there was no difference between the amount contributed to the domestic and international charities implies that hypothesized effect of social distance was incorrect, nationality and location of the beneficiaries either is not heavily weighted in social distance or social distance has no effect on the amount contributed.

As shown in Table 1, there was a large percentage of participants who identified with Protestantism, followed by Catholicism. The variables, *Agnosticism*, *Atheism*, and *Nonreligious*, were grouped in the category *Non-theistic*. The variables, *Catholicism*, *Islam*, *Other*, and *Pantheism*, were grouped in the category *Theistic*. Because *Protestantism* had the largest percentage, it remained ungrouped and omitted from regression analysis to serve as the base for comparison. *Prefer Not To Respond* remained ungrouped but was also remain in analysis.

Table 4: Proportion of Religious Identity

Religious Identity	Proportion
Agnosticism	6.67%
Atheism	3.33%
Buddhism	1.67%
Protestantism	61.67%
Catholicism	11.67%
Islam	1.67%
Nonreligious	1.67%
Other	3.33%
Pantheism	1.67%
Prefer Not To Give Religion	6.67%

The analysis of the predictive power of religious identity in the amount contributed is shown in Table 5. The lack of significance agrees with the results of Shariff and Norenzayan (2006), the self-reported religious identity does not significantly affect the amount given. However, those who chose not to disclose their religious identity did differ significantly from the base group, *Protestantism*.

Table 5: Religious Identity on Contribution

	(1)	(2)
Theistic	-0.142	-0.139
	-0.094	-0.100
Non Theistic	-0.056	-0.048
	-0.137	-0.152
Saliency	-0.018	-0.017
	-0.023	-0.026
Prefer Not to Give Religion	-0.430**	-0.432**
	-0.14	-0.144
Age		-0.000
		-0.007
Male		-0.011
		-0.080
Intercept	1.036***	1.037***
	-0.109	-0.165
N	60	60
adj. R²	0.127	0.094

Even though, there was lack of significance in the religious identities' grouping in predicting the amount contributed, the religious identity of the participant may still interact with the prime (e.g., a person who believe in a deity responds more to the religious prime than someone who does not believe in a deity). However, as shown in Table 6, there was no evidence of interaction between the prime and religious groupings.

Table 6: Interaction Analysis

	(1)	(2)
Religious Prime*Theistic	-0.0452	
	-0.135	
Religious Prime*Nontheistic	0.0833	
	-0.296	
Justice Prime*Nontheistic	0.125	
	-0.164	
Justice Prime*Theistic	-0.0625	
	-0.164	
Religious Prime	-0.0583	
	-0.104	
Justice Prime	-0.163	
	-0.104	
International Charity		-0.211
		-0.138
Domestic Charity		-0.627***
		-0.155
International Charity*Religious Studies		0.187
		-0.14
Domestic Charity*Religious Studies		0.603***
		-0.156
Intercept	0.975***	0.961***
	-0.0636	-0.0573
N	60	60
adj. R²	-0.036	0.2
F	0.66	4.68***

Because of the possibility of decreased social distance caused by the commonality of language, between French students and the International charity, which is located in Haiti, a francophone country, a second analysis was conducted focusing on the interaction between the type of charity and the subject of the class the participant was surveyed in. The French students were used as the base group. At a 1% significance level, French students gave an average of \$.60 less to the domestic charity than Religious Studies students. French students also gave an average of \$.19 less to the international charity.

CONCLUSION

The idea that social institutions, like religion and the justice system, increase prosocial behavior is not only untrue for this scenario but is also in direct opposition with the findings of this study, because of the significant decrease in amount donated by those primed with religious and justice themes. Since the study is modeled after Shariff and Norenzayan (2006), one could conclude that having a charity as the second player significantly changes the scenario. Does religion and justice cause people to be more generous with others but less generous with charities? That might be a possibility but since the purpose of most charities is to help others, there must be something that disconnects the two concepts. I can only speculate at what that might be. Another potential reason for the differences in the results is the differences in the participants in the two studies, whether it is regional, demographic, or other factors. The effect of the concept of justice is statistically more negative than religion, possibly suggesting that the hypothesized “disconnect” between the two studies may be more associated with justice. An alternative explanation for the increased effect of the justice prime is the association of justice and people receiving what is deserved. This might cause people to view charity as unprincipled, since it is giving to those who may or may not be deserving.

The effect of knowing information about the charity decreasing the amount given was unexpected and counterintuitive, since in the reverse is typically true for the Dictator Game. Because the second player is no longer a person but an entity, having more knowledge might not be better. Naming the charity and stating its purpose might have made participants feel as if they had the responsibility of determining if the charity’s mission was worthy or unworthy, while the other participants automatically assumed the unnamed charity was a worthy or that it was not their responsibility to do so. However, this applies only to knowing a charity’s mission. I do

believe the results would be reverse had the participants heard personal stories and testimonies of the beneficiaries, but this hypothesis would need further investigation.

By comparing the analysis focusing on the differences between the primed groups and the analysis of the predictive power of self-reported religious identity, this study finds similar results to the results of the study conducted by Shariff and Norenzayan, which found that the theme of the primer has more influence on the amount given better than religious identity, and is in contrast with the findings of the study conducted by Benjamin, Choi, and Fisher. This research has further implications for the marketing of charitable organizations, suggesting that using religious or judicial undertones might significantly decrease the amount an individual donates and that giving individuals minimal information might increase the amount donated.

Conducting this study in a different setting where participants could not see other's actions and others could not see the participant's actions would help eliminate the possibility that the actions were influenced by other's opinion. People who participate in organized religion might do so because they prefer to belong to a group, which might make them more likely to donate more and keep less than they would have if they had seen other's actions.

In further research, the results would be more beneficial with a more diverse group of participants, especially considering the religious identity of the participants. Another beneficial variable to record would be the national origin of the participant. Since national origin can have a significant influence on one's religious identity and could also affect one's view towards charity, its inclusion might prove to have a significant influence.

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APPENDIX A: RELIGIOUS-THEMED PRIMER/DOMESTIC CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

truly hello is heavenly cake

poor some died liver soul

God they in smart believe

faithful science her is husband

comfort me gives hard prayer

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity that focuses on helping those in the agricultural industry in the Arkansas Delta and Appalachia. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX B: RELIGIOUS-THEMED PRIMER/INTERNATIONAL CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

truly hello is heavenly cake

poor some died liver soul

God they in smart believe

faithful science her is husband

comfort me gives hard prayer

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity that focuses on helping those in the agricultural industry in Haiti. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX C: RELIGIOUS-THEMED PRIMER/UNNAMED CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

truly hello is heavenly cake

poor some died liver soul

God they in smart believe

faithful science her is husband

comfort me gives hard prayer

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX D: JUSTICE-THEMED PRIMER/DOMESTIC CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

deserves that justice man jumps

smart boy the he counseled

judge sits the there play

the guilty dog food looks

officers donuts foundation like police

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity that focuses on helping those in the agricultural industry in the Arkansas Delta and Appalachia. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX E: JUSTICE-THEMED PRIMER/INTERNATIONAL CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

deserves that justice man jumps

smart boy the he counseled

judge sits the there play

the guilty dog food looks

officers donuts foundation like police

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity that focuses on helping those in the agricultural industry in Haiti. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX F: JUSTICE-THEMED PRIMER/UNANAMED CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

deserves that justice man jumps

smart boy the he counseled

judge sits the there play

the guilty dog food looks

officers donuts foundation like police

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX G: NEUTRAL-THEMED PRIMER/DOMESTIC CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

quit Earth round the is

sour plane apple green taste

attracts a bag bees flower

today her is birthday clown

drank play man the coffee

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity that focuses on helping those in the agricultural industry in the Arkansas Delta and Appalachia. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX H: NEUTRAL-THEMED PRIMER/INTERNATIONAL CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

quit Earth round the is

sour plane apple green taste

attracts a bag bees flower

today her is birthday clown

drank play man the coffee

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity that focuses on helping those in the agricultural industry in Haiti. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX I: NEUTRAL-THEMED PRIMER/UNNAMED CHARITY

Please unscramble each group of words to make a complete sentence by removing one of the words.

quit Earth round the is

sour plane apple green taste

attracts a bag bees flower

today her is birthday clown

drank play man the coffee

Please fill in the blank for the following scenario

You are given \$1. You have the option to give any amount of that money to a charity. You keep the remainder.

I choose to give _____ and keep _____.

APPENDIX J: DEMOGRAPHIC SURVEY

Please answer the following questions:

Q1: What is your age? _____

Q2: What is your gender? _____ Male _____ Female

Q3: What is your religious preference?

_____ Agnosticism

_____ Atheism

_____ Buddhism

_____ Christianity (Protestant)

_____ Christianity (Roman Catholicism)

_____ Hinduism

_____ Islam

_____ Judaism

_____ Mormonism

_____ Nonreligious

_____ Other _____

_____ Prefer not to answer

Q4: How often do you practice your religion?

_____ Once a year

_____ On major holidays

_____ Once a month

_____ Once a week

_____ More than once a week

_____ Never

_____ Prefer not to answer

